



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/758,544

01/16/2004

Sami Kekki

60279.00080

5581

32294

7590

07/11/2008

SQUIRE, SANDERS & DEMPSEY L.L.P.
8000 TOWERS CRESCENT DRIVE
14TH FLOOR
VIENNA, VA 22182-6212

EXAMINER

SAMUEL, DEWANDA A

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

07/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/758,544	Applicant(s) KEKKI, SAMI	
	Examiner DEWANDA SAMUEL	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to the communication filed on 04/09/2008.
2. Claims 1, 3-31 are pending.

Response to Arguments

3. Applicant's arguments with respect to claim 1, 3-31 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claim 1, 3-28 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Willars et al. (US Patent 7,072,329) in view of Sasson et al. (US Patent 6,728,261).

With regard to claim 1, Willars et al. discloses having a method, Willars et al. discloses having a interworking function or interworking gateway represented by interworking..., gateway 50A ("inter-function")...transport layer interworking gateway 50 providing connection to a ATM transport bearer (column 10n line 29-38), comprised: configuring said inter-working function to use uses a user defined information element of an existing protocol, using the existing protocol to establish data transport bearers; to adapt a new protocol for controlling the transport bearers in the Transport Network Layer; and conveying transport related information between entities in asynchronous transfer mode and an internet protocol transport networks for controlling the transport bearers in the transport network layer. Willars et al. discloses having a... interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29- 38)... transport bearer initiating procedure which utilizing the interworking with q.all2 signaling (column 10 46-49)... uses a binding identification such as served user generated reference ("user defined information element") used in IP - ALCAP protocol establishing a transport bearer in the transport network (column 11 line 1-53). Willars et al. discloses having a interworking function that interface with IP and ATM networks (column 6 line 1-5). However, Willars et al. does not explicitly discloses conveying transport related information between entities in asynchronous transfer mode and an internet protocol transport networks for controlling the transport bearers in the transport network layer. Sasson discloses having a IWF between a ATM

network and a IP network ensuring end-to-end data transmission (fig 2 and column 3 line 34-50).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a interworking function or interworking gateway represented by interworking..., gateway 50A ("inter- function") as taught by Willars et al. incorporating a IWF between a ATM network and a IP network ensuring end-to-end data transmission as taught by Sasson providing a efficient interworking function whereby controlling signaling bearers information within the radio network.

With regard to claim 3, in combination Willars et al. and Sasson et al. teaches the method recited in claim 1. wherein said transport related information includes at least one: transport network layer address information, transport network layer resource information, Transmission Time Interval of the transport network layer user, packet size information and Quality of Service information. Willars et al. discloses having a interworking with q.aal2 signaling: option of using an IP specific protocol over the IP network (column 13 line 5-7)... also having a establish request message 4A-3 on the transport layer to the interworking gateway 50... the establish request message 4A-3 includes the E164 address of the endpoint node..., the ALCAAL type 2 link characteristics (column 13 line 54-65).

With regard to claim 4, In combination Willars et al. and Sasson et al. teaches the method recited in claim 1. further comprising: using said asynchronous transfer mode transport network in a radio access network wherein said existing protocol is access link control application protocol based on asynchronous transfer mode adaptation layer type 2 signaling . Willars discloses having in fig. 3A ATM network ("ATM transport network") used in a radio access network...with q.aal2 signaling which synonymous with Q.2630.1 (column 11 line 26-28) ...which is a ALCAP protocol (column 4 line 51).

With regard to claim 5, in combination Willars et al. and Sasson et al. teaches the method recited in claim 4. wherein said asynchronous transfer mode adaptation layer type 2 signaling is based on Telecommunication Union Recommendation Q.2630. Willars et discloses having q.aal2 signaling which synonymous with Q.2630.1 .(column 11 line 26-28).

With regard to claim 6, In combination Willars et al. and Sasson et al. teaches the method recited in claim 5.wherein as said user defined information element of an existing access link control application protocol is utilized a served user transport element of said Q. 2630 signaling. Willars et al. discloses having a served user

generated reference (SUGR "information element") ...SUGR used in IP-ALCAP protocol of the Q.2630.1 signaling (column 11 line 46- 51).

With regard to claim 7, in combination Willars et al. and Sasson et al. teaches the method recited in claim 1. further comprising using said user defined information element in said new protocol for conveying information needed by said existing access link control application protocol. Willars et al. discloses having a served user generated reference (SUGR "information element") ... SUGR used in IP- ALCAP protocol (column 11 line 46-53).

With regard to claim 8, in combination Willars et al. and Sasson et al. teaches the method recited in claim 1. further comprising including said user defined information element in the establish confirm message of said existing protocol, wherein said existing protocol comprises access link control application protocol. Willars et al. discloses having SUGR ("information element") within a q.aa2 establish confirmation message (column 12 line 40-42).

With regard to claim 9, in combination Willars et al. and Sasson et al. teaches the method recited in claim 1. further comprising including said user defined information element in the establish request message of said existing protocol, wherein said existing protocol comprises access link control application protocol. Willars et al.

discloses SUGR ("information element") within an q.aa2 establish request message 3B-4 which is initiating a connection (column 12 line 32-35).

With regard to claim 10, in combination Willars et al. and Sasson et al. teaches the method recited in claim 1. further comprising : receiving an address information of an radio access network node, checking whether said address information is compatible with an address space of receiving protocol, and if said address information is not compatible, determining an address of said inter-working function. Willars et al. discloses having receiving a initiation response message with the address for a node 3B-N ("radio access node", e.g. an E. 164 address).., node 3B-26 queries database 54 to translate the E. 164 address received for node 3B-N to the IP address of the appropriate interworking gateway 50 (column 12 line 14-24).

With regard to claim 11, in combination Willars et al. and Sasson et al. teaches the method recited in claim 10. wherein the determining of the address of said inter-working function is determined by default for each network node. Willars et al. discloses having a... interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38)... in order for a node to reach another node on the IP network it must be transmitted to the appropriate interworking gateway 50... node 3B-26 queries database 54 to translate the E. 164 address received for node 3B-N to the IP address of the appropriate interworking gateway 50 (column 12

line 14-24).

With regard to claim 12, in combination Willars et al. and Sasson et al. teaches the method recited in claim 10 further comprising querying the address of said inter-working function from a centralized location in said network. Willars et al. discloses having a node 3B-26 queries database 54 to translate the E. 164 address received for node 3B-N to the IP address of the appropriate interworking gateway 50 (column 12 line 14-24).

With regard to claim 13, in combination Willars et al. and Sasson et al. . teaches the method recited in claim 10. wherein the determining of the address of said inter-working function is determined based on a physical port from which an application protocol message was received. Willars et al. discloses the IP bearer signaling message 3B-3 includes the connection information for the interworking gateway 50... the connection indicator ([IP address, endpoint identifier such as UDP port number], column 12 43-47).

With regard to claim 14, in combination Willars et al. and Sasson et al. teaches the method recited in claim 10. wherein the determining the address of said inter-working function is determined based on a logical port from which application protocol message was received. Willars et al. discloses the IP bearer signaling message 3B-3 includes the connection information for the interworking gateway 50...

the connection" indicator ([IP address, endpoint identifier such as UDP port number], column 12 43-47). It is known in the art the IP address and the UDP port number is called a socket which is a logical port.

With regard to claim 15, in combination Willars et al. and Sasson et al. teaches the method recited in claim 10. wherein the checking comprises using a type of address information field that indicates at least one of a set including, a type of a network node, a type of address and a type of transport layer. Willars et al. discloses having a process for interworking with Q.aal2 signaling: option using an IP specific signaling protocol over the IP network (column 13 line 5-8)... the interworking gateway 50 queries the database 52 in order to translate the AAL2 network address, e.g., the E.164 address ("type of address"), to an IP address of the endpoint (column 13 line 66-67 and column 14 line 1-10). It is inferred the interworking gateway 50 check the AAL2 network address, e.g., the E. 164 address ("type of address"), address before further processing is initiated.

With regard to claim 16, in combination Willars et al. and Sasson et al. teaches the method recited in claim 10. wherein said checking comprises using a type of node information field that indicates at least one of a set including, a type of a network node, a type of address and a type of transport layer. Willars et al. discloses having a process for interworking with Q.aal2 signaling: option using an IP specific signaling protocol over the IP network (column 13 line 5-8)... the interworking gateway 50 queries the database

52 in order to translate the AAL2 network address, e.g., the E. 164 address ("type of address"), to an IP address of the endpoint (column 13 line 66-67 and column 14 line 1-10). It is inferred the interworking gateway 50 check the AAL2 network address, e.g., the E. 164 address ("type of address"), address before further processing is initiated.

With regard to claim 17, in combination Willars et al. and Sasson et al. teaches the method recited in claim 7. wherein said checking comprises using a type of transport layer information field that indicates at least one of a set including, a type of a network node, a type of address and a type of transport layer. Willars et al. discloses having a process for interworking with Q.aal2 signaling: option using an IP specific signaling protocol over the IP network (column 13 line 5-8)...the interworking gateway 50 queries ("type of address"), to an IP address of the endpoint (column 13 line 66-67 and column 14 line 1-10). It is inferred the interworking gateway 50 check the AAL2 network address, e.g., the E. 164 address ("type of address"), address before further processing is initiated.

With regard to claim 18, in combination Willars et al. and Sasson et al. teaches the method recited in claim 1. further comprising: making in said interworking function a mapping between a first interface of said existing protocol and the second interface of said new protocol, wherein said mapping is based on information in said user defined element. Willars et al. discloses having a... interworking function or

interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38)... in fig. 4A the interworking gateway 50 queries the database 52 in order to translate the AAL2 network address, e.g., the E.164 address ("type of address"), to an IP address of the endpoint (column 3 line 66-67 and column 1.4 line 1-10). It is inferred the interworking gateway 50 check he AAL2 network address, e.g., the E.164 address ("type of address!"), address before urther processing is initiated.

With regard to claim 19, in combination Willars et al. and Sasson et al. teaches the method recited in claim 1. further comprising implementing implementin,q said inter'working function as a stand-alone node in said asynchronous transfer mode transport network. Willars discloses having a Willars et al. also discloses having . an interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38) which is a stand-alone device in e database 52 in order to translate the AAL2 network address, e.g., the E. 164 address the ATM network (fig. 3B).

With regard to claim 20, In combination Willars et al. and Sasson et al. teaches the method recited in claim 1. further comprising implementing said inter-working function as a stand-alone node in a transport network. Willars discloses having a Willars et al. discloses having a... interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38) which is a stand-alone device in the ATM network (fig. 3B).

With regard to claim 21, in combination Willars et al. and Sasson et al. teaches the method recited in claim 1. further comprising: implementing said inter-working function as a part of a network node in said asynchronous transfer mode transport network. Willars discloses having a Willars et al. discloses having a... interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38) which is a stand-alone device in the ATM network (fig. 3B).

With regard to claim 22, in combination Willars et al. and Sasson et al. teaches the method recited in claim 1. further comprising: implementing said inter-working function as a part of a network node in a transport network. Willars discloses having a Willars et al. discloses having a... interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38) which is a stand-alone device in the ATM network (fig. 3B).

With regard to claim 23, in combination Willars et al. and Sasson et al. teaches the method recited in claim 22. wherein said transport network is based on internet protocol network. Willars et al. discloses having a transport network that uses IP specific signaling protocol over the IP network (column 6 line 9-13 and column 13 line 5-67).

With regard to claim 24, Willars et al. discloses having a system comprising: an inter-working function linked with an asynchronous transfer mode transport network and an internet protocol transport network, wherein said inter-working function comprises a mapping entity that is configured to; use a user defined information element of an existing protocol, that is used for establishing data transport bearers, to adapt a new protocol for controlling the transport bearers in a Transport Network Layer, and convey transport related information between entities in the asynchronous transfer mode and internet protocol transport networks for controlling the transport bearers in the transport network layer. Willars et al. discloses having a... interworking function or interworking gateway represented by interworking gateway 50A ("inter-working function", column 10 line 29-38) link with a ATM transport network (fig. 3B). Willars et al. further transport bearer initiating procedure which utilizing the interworking with q.all2 signaling (column 10 46,49)... uses a binding identification such as served user generated reference ("user defined information element")used in IP -ALCAP protocol establishing a transport bearer in the transport network (column 11 line 1-53). However, Willars et al. does not. explicitly discloses conveying transport related information between entities in the ATM and IP transport networks for controlling the transport bearers in the Transport network layer. Sasson discloses having a IWF between a ATM network and a IP network ensuring end-to-end data transmission (fig 2 and column 3 line 34-50).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a interworking function or interworking gateway

represented by interworking..., gateway 50A ("inter- function") as taught by Willars et al. incorporating a IWF between a ATM network and a IP network ensuring end-to-end data transmission as taught by Sasson providing a efficient interworking function whereby controlling signaling bearers information within the radio network.

With regard to claim 25, in combination Willars et al. and Sasson et al. teaches the apparatus recited in claim 24. wherein said asynchronous transfer mode transport network is used in radio access network; and wherein said existing protocol is a...access link control application protocol based on asynchronous transfer mode adaptation layer type 2 signaling. Willars discloses having in fig. 3A a ATM network ("ATM transport network") used in a radio access network...with q.aal2 signaling which synonymous with Q.2630.1 (column 11 line 26-28) ...which is a ALCAP protocol (column 4 line 51).

With regard to claim 26, in combination Willars et al. and Sasson et al. teaches the method recited in claim 24. wherein is based on International Telecommunication Union Recommendation Q.2630. Willars et discloses having q.aal2 signaling which synonymous with Q.2630.1 (column 11 line 26-28).

With regard to claim 27, in combination Willars et al. and Sasson et al. al. teaches the apparatus recited in claim 24. wherein the inter-working function is further configured to utilize as said user defined information element of an existing protocol is a

served user transport Element of said Q.2630 signaling. Willars et al. discloses having a served user generated reference (SUGR "information element"). SUGR used in IP-ALCAP protocol of the Q.2630.1 signaling (column 11 line 46-51).

With regard to claim 28, in combination Willars et al. and Sasson et al. teaches the apparatus recited in claim 24. wherein the inter-working function is further configured to provide a checking entity configured to check whether an address information is compatible with an address space of receiving protocol, when receiving an address information of an radio access network node; and an address determining entity configured to determine an address of the said inter-working function. Willars et al. discloses having receiving a initiation response message with the address for a node 3B-N (" radio access node", e.g. an E.164 address)..., node 3B-26 queries database 54 to translate the E. 164 address received for node 3B-N to the IP address of the appropriate interworking gateway 50 (column 12 line 14-24).

With regard to claim 31, Willars et al. discloses having an apparatus comprising: a controller configured to control an inter-working function linked with an asynchronous transfer mode transport network and an internet protocol transport network; Willars et al. discloses having a interworking function or interworking gateway represented by interworking..., gateway 50A ("inter-function")...transport layer interworking gateway 50 providing connection to a ATM transport bearer (column 10n line 29-38)

a mapper configured to use a user defined information element of an existing protocol to establish data transport bearers to adapt a new protocol to control the transport bearers in a transport network layer; and a conveyor configured to convey transport related information between entities in the asynchronous transfer mode and internet protocol transport networks for controlling the transport bearers in the transport network layer. Willars et al. discloses having a... interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38)... transport bearer initiating procedure which utilizing the interworking with q.all2 signaling (column 10 46-49)... uses a binding identification such as served user generated reference ("user defined information element") used in IP - ALCAP protocol establishing a transport bearer in the transport network (column 11 line 1-53). Willars et al. discloses having a interworking function that interface with IP and ATM networks (column 6 line 1-5). However, Willars et al. does not explicitly discloses having a conveyor configured to convey transport related information between entities in the asynchronous transfer mode and internet protocol transport networks for controlling the transport bearers in the transport network layer. Sasson discloses having a IWF between a ATM network and a IP network ensuring end-to-end data transmission (fig 2 and column 3 line 34-50).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a interworking function or interworking gateway

represented by interworking..., gateway 50A ("inter- function") as taught by Willars et al. incorporating a IWF between a ATM network and a IP network ensuring end-to-end data transmission as taught by Sasson providing a efficient interworking function whereby controlling signaling bearers information within the radio network.

7. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasson et al. (US patent 6,728,261) in view of Willars et al. (US Patent 71072,329).

With regard to claim 29, Sasson et al. discloses having an apparatus comprising: controlling means for controlling an inter-working function linked with an asynchronous transfer mode transport network and an internet protocol transport network; Sasson et al. discloses having a interworking function ('apparatus", IWF)between ATM and IP protocols and networks (Abstract). mapping means for using a user defined information element of an existing protocol for establishing data transport bearers to adapt a new protocol for controlling the transport bearers in a transport network layer; Sasson et al. discloses processing ATM connections through the interworking functions ("mapping means", column 3 line 18-25). However, Sasson et al. does not explicitly discloses mapping means for using a user defined information element of an existing protocol for establishing data transport

bearers to adapt a new protocol for controlling the transport bearers in a Transport Network Layer. Willars et al. uses a binding identification such as served user generated reference ("user defined information element") used in IP -ALCAP protocol establishing a transport bearer in the transport network (column 11 line 1-53).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have ATM connections through the interworking.functions("mapping means") as taught by Sasson et al. uses a binding identification such as served user generated reference ("user defined information element") used in IP -ALCAP protocol establishing a transport bearer in the transport network as taught by Willars et al. efficiently communicating user data whereby mapping radio control elements with a core network.

conveying means for conveying transport related information between entities in the asynchronous transfer mode and internet protocol transport networks for controlling the transport bearers in the transport network layer. Sasson discloses having a IWF between a ATM network and a IP network ensuring end-to-end data transmission (fig 2 and column 3 line 34-50).

With regard to claim 30, the computer program claim is interpreted and rejected on the same grounds as the apparatus claim 29.

Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Oda et al. (US Patent 6,522,667) discloses having a network interworking device for IP network/ATM network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEWANDA SAMUEL whose telephone number is (571)270-1213. The examiner can normally be reached on Monday- Thursday 8:30-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art
Unit 2616

/DeWanda Samuel/
Examiner, Art Unit 2616
7/14/2008